In The Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) A method of forming an electronic device, the method comprising:

forming a first electrode;

after forming the first electrode, forming a dielectric oxide layer on the first electrode wherein the dielectric oxide layer includes titanium, wherein a first portion of the dielectric oxide layer adjacent the first electrode has a first density of titanium, and wherein a second portion of the dielectric oxide layer opposite the first electrode has a second density of titanium ~~different~~ less than the first density; and

after forming the dielectric oxide layer, forming a second electrode on the dielectric oxide layer so that the dielectric oxide layer is between the first and second electrodes.

2. (original) A method according to Claim 1 wherein the dielectric oxide layer further includes tantalum.

3. (original) A method according to Claim 1 wherein the dielectric oxide layer comprises tantalum titanium oxide.

4. (original) A method according to Claim 1 wherein forming the first electrode comprises forming the first electrode on a substrate so that the first electrode is between the substrate and the dielectric oxide layer.

Claim 5 (canceled).

6. (currently amended) A method according to ~~Claim 5~~ Claim 1 wherein the first density of titanium is in the range of approximately 0.1 to 15 percent.

7. (currently amended) A method according to ~~Claim 5~~ Claim 1 wherein the second density of titanium is in the range of approximately 0.001 to 3 percent.

Claims 8-10 (canceled).

11. (original) A method according to Claim 1 wherein each of the first and second electrodes comprises at least one of doped polysilicon, metal, metal oxide, metal nitride, and/or metal oxynitride.

12. (original) A method according to Claim 1 further comprising:
forming a reaction suppressing layer between the first electrode and the dielectric layer.

13. (original) A method according to Claim 12 wherein the reaction suppressing layer comprises at least one of silicon nitride, silicon oxide, and/or silicon oxynitride.

Claims 14-77 (canceled).

78. (currently amended) A method for manufacturing a semiconductor memory device, the method comprising:

(a) forming a lower electrode on an upper surface of the semiconductor substrate;

(b) forming a reaction suppressing layer on an upper surface of the lower electrode;

(c) forming a first tantalum titanium oxide film on an upper surface of the reaction suppressing layer;

(d) after forming the first tantalum titanium oxide film, forming a second tantalum titanium oxide film on an upper surface of the first tantalum titanium oxide film wherein the

second tantalum titanium oxide film has a titanium density less than a titanium density of the first tantalum titanium oxide film;

(e) applying a thermal process to the first and the second tantalum titanium oxide films under an oxygen atmosphere; and

(f) forming an upper electrode on an upper surface of the second tantalum titanium oxide film,

wherein a density of titanium is adjusted to be 0.1 to 15 percent when the first tantalum titanium oxide film is formed ~~and a density of titanium of the second tantalum titanium oxide film is higher than the density of titanium of the first tantalum titanium oxide film~~.

Claims 79-111 (Canceled).

112. (currently amended) The method of ~~claim 111~~ claim 12, wherein the reaction suppressing layer is one of a silicon nitride film, a silicon oxide film, and a silicon oxynitride film.

113. (previously presented) The method of claim 112, wherein the reaction suppressing layer is formed by applying one of a rapid thermal nitridation, a rapid thermal oxidation, and a combination thereof to a surface of the lower electrode.

114. (previously presented) The method of claim 112, wherein the reaction suppressing layer is formed by chemical vapor deposition.

115. (currently amended) The method of ~~claim 63~~ claim 7, wherein ~~step (b)~~ forming a dielectric layer further comprises:

separately supplying a titanium precursor, a tantalum precursor, and oxygen gas into a reactor; and

reacting the titanium precursor, the tantalum precursor, and the oxygen gas with each other within the reactor.

116. (previously presented) The method of claim 115, wherein the tantalum precursor is one of a metal alkoxide such as $Ta(OC_2H_5)_5$, an organometalic such as a metal beta deketonate, and a metal halide such as $TaCl_5$.

117. (previously presented) The method of claim 115, wherein the titanium precursor is a compound such as one of $Ti(OCH(CH_3)_2)_4$, $Ti(OC_2H_5)_4$, $TiCl_4$, and a tetrakis-dimethylamido-titanium (TDMAT).

118. (currently amended) The method of ~~claim 63~~ claim 1, wherein forming a dielectric layer comprises mixing~~, in step (b),~~ a tantalum precursor and a titanium precursor ~~are mixed~~ outside of a reactor and supplying a mixture of the titanium and tantalum precursors ~~is supplied~~ into the reactor.

Claim 119 (canceled).

120. (currently amended) The method of ~~claim 118~~ claim 1, wherein a density of titanium in the dielectric layer is controlled by the deposition temperature and the flow rate of the precursor.

121. (currently amended) A method for manufacturing a semiconductor memory device, the method comprising:

(a) forming a lower electrode on an upper surface of a semiconductor substrate;

(b) after forming the lower electrode, forming a dielectric layer of a oxide film including titanium and tantalum, on an upper surface of the lower electrode in a reactor; and

(c) after forming the dielectric layer, forming an upper electrode on an upper surface of the dielectric layer,

wherein, in step (b), the dielectric layer has a first density of titanium adjacent the lower electrode and wherein the dielectric layer has a second density of titanium adjacent the upper

electrode and wherein the ~~first and~~ second density ~~densities~~ of titanium ~~are different~~ is less than the first density of titanium;

wherein, in step (b), the first and second densities of titanium are in the range of 0.1 to 15 percent;

wherein, in step (b), a tantalum precursor and a titanium precursor are mixed outside of the reactor and wherein a mixture of the tantalum and titanium precursors is supplied into the reactor;

wherein the dielectric layer is formed at a temperature of 100 to 700° and a pressure of 100 to 760mTorr.

122. (previously presented) The method of claim 121, wherein the tantalum precursor and the titanium precursor are provided at a rate of 5 to 200mg/min and the oxygen gas is supplied at a rate of 10sccm to 10slm.

Claims 123-124 (canceled).

125. (previously presented) The method of claim 78, wherein a density of titanium of the second tantalum titanium oxide film is 10 to 20% percent.

126. (previously presented) The method of claim 78, wherein the reaction suppressing layer is one of a silicon nitride film, a silicon oxide film, and a silicon oxynitride film.

127. (previously presented) The method of claim 126, wherein the reaction suppressing layer is formed by applying one of a rapid thermal nitridation, a rapid thermal oxidation, or a combination thereof to a surface of the lower electrode.

128. (previously presented) The method of claim 126, wherein the reaction suppressing layer is formed by chemical vapor deposition.

129. (previously presented) The method of claim 78, wherein steps (c) and (d) further comprise:

separately supplying a titanium precursor, a tantalum precursor, and oxygen gas into a reactor; and

reacting the titanium precursor, the tantalum precursor, and the oxygen gas with each other within the reactor.

130. (previously presented) The method of claim 129, wherein the tantalum precursor is one of a metal alkoxide such as $Ta(OC_2H_5)_5$, an organometalic such as a metal beta deketonate, and a metal halide such as $TaCl_5$.

131. (previously presented) The method of claim 129, wherein the titanium precursor is a compound such as one of $Ti(OCH(CH_3)_2)_4$, $Ti(OC_2H_5)_4$, $TiCl_4$, and a tetrakis-dimethylamido-titanium (TDMAT).

132. (previously presented) The method of claim 78, wherein, in steps (c) and (d), a tantalum precursor and a titanium precursor are mixed outside of a reactor and wherein a mixture of the tantalum and titanium precursors is supplied into the reactor.

133. (previously presented) The method of claim 132, wherein the tantalum precursor is pentaethoxy tantalum $Ta(OCH_2CH_3)_6$, (PET) and the titanium precursor is tetraethoxy titanium $Ti(OCH_2CH_3)_4$, (TET).

134. (previously presented) The method of claim 132, wherein a density of titanium in the dielectric layer is controlled by the deposition temperature and the flow rate of the precursor.

135. (previously presented) The method of claim 132, wherein the tantalum titanium oxide film is formed under a temperature of 100 to 700° and a pressure of 100 to 760mTorr.

136. (previously presented) The method of claim 135, wherein, in steps (c) and (d), the tantalum precursor and the titanium precursor are provided at a rate of 5 to 200mg/min and the oxygen gas is supplied at a rate of 10sccm to 10slm.